

threshold. This eliminates the need for inventory control itself.

In other words, by collectively controlling the production, physical distribution, inventory, order  
5 receipts, and distribution of a great variety of toner cartridges, it is possible to adjust the inventory of toner cartridges between the master warehouse 5 and branch warehouses 6 according to production and order receipts. Therefore, toner cartridges can be supplied to the user 4  
10 in a short period even if the warehouse of the seller 3 or the like is not stocked with office consumables. This solves problems caused by excessive inventory or zero inventory carried by the seller 3 and removes increased interest burdens due to excessive inventory.

15 Besides, by using the shared DB 8, the collection center 7 can estimate future collection of toner cartridges based on the quantities of toner cartridges currently being used, purchase dates, number of users registered for collection programs, etc. This estimation makes it possible  
20 to keep track of what types of toner cartridge will be returned, when and in what quantities. If collection-completed information, which is sent from the terminals of collectors (delivery agents) when toner cartridges are actually collected from users, is received and grasped by  
25 a main server 81, it is possible to plan a more accurate collection and recycling schedule of used cartridges. Consequently, used cartridges can be collected and recycled

efficiently at low cost through aggressive recycling activities. Details will be described later.

Furthermore, since the labor and cost of recycling used toner cartridges can be minimized, it is possible to prevent disposal of used toner cartridges, resulting in an increased collection rate. This makes it possible to build environmentally friendly collection system and recycling system.

The sales and collection system which implement the flow of toner cartridges shown in FIG. 2 will be described below.

[Sales and collection system]

FIG. 3 is a diagram showing an example configuration of the sales and collection system of toner cartridges.

The main server 81 provides the shared DB 8. Incidentally, the shared DB 8 is not necessarily provided by a single server. It may be split among two or more servers or provided in parallel by two or more servers. In short, the shared DB 8 needs to be provided as a single database only logically.

The main server 81 is connected via a wide area network (WAN) 100, such as the Internet, with a plurality of terminals which use the shared DB 8. Terminals 13, 31, 41, 51, 61, and 71 belong to the manufacturer 1, seller 3, user 4, master warehouse 5, branch warehouses 6, and collection center 7, respectively. A terminal 32 is a mobile terminal used by a salesman or serviceman of the seller 3 while a

terminal 62 is a mobile terminal used by an expediter of a distributor. The mobile terminals used by salesmen or servicemen serve the purpose of the present invention as long as they have the same configuration/functions as the  
5 terminal 41.

Now, the internal structure of the main server 81 shown in FIG. 3 will be described with reference to FIG. 15, which is an internal block diagram of the main server 81. As shown in FIG. 15, the main server 81 comprises a CPU 1501, an input  
10 device 1502, a main storage 1503, an output device 1504, the auxiliary storage 1505, and a communications device 1506.

The CPU 1501, which is a member known under the alias of a processor, has a control function of sending commands  
15 to various devices in the system and controlling their operations and a function of performing arithmetic processing of digital data in the central part of the server.

The input device 1502, which is used to enter various  
20 data, may be, for example, a keyboard, mouse, pointing device, touch panel, mouse pad, CCD camera, card reader, paper tape reader, or magnetic tape reader. If instruction data is entered, for example, on an interface screen in FIG. 6 using an output device such as a mouse, the CPU 1501  
25 recognizes the entered information and performs a process which will transfer the CPU 1501 to a next process.